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ABSTRACT

In recent times, sociological constructs have been used to examine school culture, viewing schools as learning communities rather than formal organizations. This paper describes use of the School Cultural Elements Questionnaire (SCEQ) to investigate the culture of schools in Western Australia. The SCEQ was first administered to all teachers in 6 Western Australian schools; 1 year later, it was administered to 164 teachers in 3 secondary schools. Teachers in two of the secondary schools were also interviewed. Data were used to develop the School Improvement Model of School Culture, which depicts the relationships among the six cultural elements and their effect on the overall school culture. The six elements that affect school improvement include teacher efficacy, an emphasis on learning, collegiality, collaboration, shared planning, and transformational leadership. The model views school culture as an open-systems structure in which an equilibrium is maintained between interactive internal elements and external factors. The model embodies some of the following propositions: (1) School culture is composed of cultural elements; (2) cultural elements facilitate cultural maintenance and growth; (3) cultural elements are vehicles for improving the effectiveness of schools; (4) cultural growth and school improvement occur when the cultural elements are well developed; (5) strong cultures are resilient when subject to external pressures; (6) weak cultures are inherently unstable and can be further destabilized or strengthened when subject to external pressures; and (7) successful school improvement is dependent on utilization of culturally oriented planning and implementation strategies. (Contains 23 references.) (LMI)

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TOWARDS A MODEL OF SCHOOL CULTURE

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ABSTRACT

The concept of school culture has evolved from studies of organisational culture and school climate in the disciplines of organisational management and school administration. In recent times, school culture has been re-examined by the application of sociological constructs in conjunction with revised conceptions of the nature of schools. The proposition of schools being learning communities rather than formal organisations provided the theoretical background for an investigation of school culture. The findings of school effectiveness research were utilised in the identification of aspects of school culture which were conducive to improved learning outcomes for students, school improvement.

A survey type instrument was utilised in the investigation of the culture of eight Western Australian schools (n = 422 teachers). The instrument was re-administered in three secondary schools after one year (n = 146 teachers). The quantitative investigation was supplemented by interviewing a stratified sample of teachers in two of these secondary schools. The findings of this inquiry were considered in conjunction with the theoretical background of the study in the development of a model of school culture oriented towards school improvement.

The School Improvement Model of School Culture has six elements which relate to school improvement, teacher efficacy, an emphasis on learning, collegiality, collaboration, shared planning and transformational leadership. The model has an open systems structure in which an equilibrium is maintained between interactive internal elements and the effects of external factors. The model is applied in a discussion of school culture and the influences upon its maintenance and growth.

The paper is a synthesis of contemporary conceptions of the nature of schools and of the cultural processes that facilitate their improvement.

RATIONALE

The notion of school culture has evolved from the organisational management social systems theories and the research on school climate. The social systems representation of the school organisation acknowledged the existence of groupings of teachers bonded together by personal and social needs (Follett, 1941; Scott ,1961; Getzels, Lipham and Campbell, 1968). It was considered that the interaction within a school's social system led to the development of a group climate and norms which, in interaction with personal and organisational needs was influential on organisational behaviour (Getzels and Thelen, 1960). The notion of school climate was originally investigated by Halpin and Croft (1962), who identified six profiles of organisational climate related to perceptions of teacher and principal behaviour in elementary schools. Tagiuri (1968), conceptualised school climate as the total environmental quality resulting from a combination of physical and social factors including the ecology, milieu, social system and culture. While these developments provided interesting frameworks to view schools, it was not until the early 1980's that links between school environment and student learning were established. Anderson (1982), reviewed the accumulated research findings on school climate and indicated the importance of cultural aspects of the school's climate on student learning. Culture was defined to be the 'social dimension of school climate concerned with belief systems, values, cognitive structures and meaning' (Anderson, 1982 p. 382).

More recently, the prevailing culture of a school has assumed importance as a significant factor in school improvement programs (Whitaker, 1993; Hillman and Stoll, 1994). In particular, Sammons, Thomas and Mortimer (1995), identified nine factors which provided 'pointers concerning the mechanism of school and departmental effectiveness' (Sammons, Thomas and Mortimer, 1995 p. 48). These were; high expectations, strong academic emphasis, shared vision/goals, clear leadership, an effective senior management team, consistency in approach, quality of teaching, student centred approach and parental involvement and support. These 'factors' reflect the values and norms of school culture. Successful school improvement necessitated attention to these factors and accordingly required a positive transformation in the culture of the school (Dalin, Rolff and Kleekamp, 1993; Fullan, 1993).

Sergiovanni (1993), criticised the continued use of organisational models to describe schools and in general, the organisational management theoretical grounding of educational

administration. Sergiovanni concluded that a major shift was required in the way schools were conceptualised and suggested that this required the application of sociological constructs. According to Sergiovanni (1993), the school needed to be viewed as a community with shared ideas, bonding between people and control being exercised through 'norms, purposes, values, professional socialisation, collegiality and natural interdependence' (Sergiovanni, 1993 p. 7). The traditional social systems and environmental representation of school culture were developed to provide administrators with knowledge to assist in the efficient management of the school and to control organisational behaviour including that which was perceived as being inconsistent with formal organisational goals. Sergiovanni's community conception of schools places school culture in an educational rather than management context.

Consideration of the educative mission of schools and the community conception of schools can be amalgamated in the notion of the school being a learning community. The culture of the learning community comprises the beliefs, attitudes, values and norms about the education of children and the social interaction within the school. The differences between this representation of schools and the traditional organisational management conception of schools is summarised in the following table.

Organisational Constructs	Learning Community Constructs
Management theory	Pedagogy
Formal organisation	Learning community
Roles and responsibilities	Natural interdependencies
Organisational structure	Curriculum
Administrative processes	Cultural processes
Organisational objectives	Educational outcomes
Organisational effectiveness	Improved student outcomes
Leadership	Facilitation of cultural transformation
Organisational development	Cultural growth

Table 1. Comparison of Organisational and Learning Community Constructs

It is proposed that there is a need for an alternative model of school culture grounded in the findings of the school effectiveness research. Incorporation of learning community concepts in

such a model of schools would provide an emphasis on both cultural constructs and the educative mission of schools. This was the objective of developing the school improvement model of school culture.

SCHOOL CULTURE

Fullan and Hargreaves (1992), described school and sub-school culture in terms of separation, connection and integration. In a separate or individualised culture, teachers have withdrawn from collective activities and work independently of one another. Cultures of connection included balkanisation, comfortable collaboration and contrived collegiality. Balkanisation is the result of strong allegiances to different groups within the school characterised by their divergent views of learning and the tendency towards insulation from the influences of other groups. Comfortable collaboration is driven by personal needs for a warm and friendly working environment, it is not the result of organisational or professional expectations. Contrived collegiality is the result of formal bureaucratic procedures which have been imposed on teachers to facilitate increased collaboration and shared decision-making. A culture of integration or fully collaborative culture values both the needs of the individual and the collective needs of groups. Hargreaves (1994), proposed a similar construct, the moving mosaic cultural form. This is characterised by collaboration, opportunism, adaptable partnerships and alliances directed by an orientation towards continuous learning and improvement.

Hargreaves (1995), proposed a model of school culture based upon expressive and instrumental domains. In the expressive domain, social cohesion is generated through maintenance of positive relationships. The instrumental domain concerns social control and task orientation. The model identifies four types of school culture; traditional with low cohesion and high control, welfarist with high cohesion and low control, hot-house with high cohesion and control, and anomic with low cohesion and low control. He also proposed a fifth type of culture, effective, which includes optimal cohesion, optimal control and the presence of high expectations and support in facilitating achievement of the expectations.

Erikson (1987), addressed the issue of the development of cultural knowledge. School culture was presented as an interpretive framework containing three different conceptions about the

possession and sharing of cultural knowledge. Firstly, cultural knowledge exists in small bits spread throughout the school, secondly there are larger chunks of common knowledge which underpin collective behaviour and thirdly, the sharing of the knowledge is related to power and status. The knowledge bits conception proposes that the school community collectively possesses a large pool of bits of information, the individual pieces being contributed by specific members and groups. No single member or group has learned the total body of knowledge. Another conception portrays culture as a conceptual structure with the presence of central organising constructs and core symbols that are widely shared throughout the school and provide cohesion and consistency of behaviour. The third concept recognises that there is a systematic variation in cultural knowledge between the groups and that the organisation of the differences has resulted from social interaction including conflict. This political struggle conception views culture as being in a state of change, new culture is continuously being created. A further consideration is of the effect that the social environment surrounding individuals and groups has on their specific cultural knowledge, not on the total body of knowledge itself. Collectively, these conceptions of Erikson portrayed school culture as a dynamic combination of shared and individual knowledge with new frameworks and knowledge being continuously learned and applied.

Alternatively, Maxwell and Thomas (1991) suggested that culture is expressed through the behaviour of groups and individuals. There is a concurrent process by which ideas, beliefs and values are developed to give meaning for the behaviour. The 'interactive model of culture' (Maxwell and Thomas, 1991) has four reciprocative elements. The central element is the belief system which embodies the tacit assumptions and understandings of the group. This influences the group value system, an expression of common judgments about the relative importance of issues and matters of concern. The group value system influences the development of norms that express behavioural expectations and associated standards which set the limits for consequent behaviour. The last element of the model is the resulting behaviour. Maxwell and Thomas suggested that each of the latter three elements will interact with and influence the preceding element. The overall system interacts with the temporal and socio-political environment in which the organisation exists and will be responsive to external influences. This model does not suggest simple one way cause-effect relationships between behaviour and the other cultural constructs, all are present and all affect each other.

The previous discussion of school cultural constructs included different explanations of the phenomenon. The Fullan and Hargreaves (1992), Hargreaves (1994) and Hargreaves (1995), approach was essentially typological, they described different types of school culture and inter-personal behaviour. Alternatively, Erikson (1987) and Maxwell and Thomas (1991), utilised a developmental approach by explaining the processes which shape and maintain culture. They also presented culture as an open system and proposed that it was in interaction with an external environment. Another approach to understanding school culture is to place it within a school effectiveness and improvement context (Daily, Rolff and Kleekamp; 1993; Fullan, 1993). The effectiveness approach gives consideration to aspects of the school which are both cultural and conducive to improvements in student learning.

Cavanagh (1997), amalgamated these three approaches. 'The culture of a learning community is manifested by the sharing of values and norms amongst teachers resulting in commonality of purpose and actions intended to improve the learning of students. The culture of the individual school is characterised by the perceived extent of participation in the interactive social processes which develop, maintain and transform the culture' (Cavanagh, 1997 p. 184).

METHODOLOGY

The overall research design was a developmental mixed-method approach (Greene, Caracelli and Graham, 1989). A critical review of literature on school effectiveness revealed eight elements of school culture deemed influential on student learning outcomes (Cavanagh and Dellar, 1995; Cavanagh and Dellar 1996). These eight cultural elements constituted the theoretical framework for the development of a survey instrument, the School Cultural Elements Questionnaire (SCEQ). The instrument was administered to 422 teachers in eight Western Australian schools. The resulting data were subjected to exploratory and confirmatory factor analysis which revealed that the original eight element theoretical framework could be condensed into a six element structure. The six cultural elements were teacher efficacy, an emphasis on learning, collegiality, collaboration, shared planning and transformational leadership (Cavanagh and Dellar, 1997). These were measured by seven item scales for each construct.

This quantitative study was supplemented by interviewing a stratified sample of teachers from two secondary schools who described their faculty and school cultures and provided examples of cultural change and the influence of the internal and external school environments. The temporal stability of school culture was further examined by re-administration of the SCEQ in three schools to 146 teachers one year later.

The reliability and validity of the empirical investigation were assessed by statistical analysis of the SCEQ scales, comparison of the quantitative and qualitative data and by examining the internal consistency of the interview data.

RESULTS

The internal reliability of the six SCEQ scales was measured statistically, all the instrument scales had Cronbach alpha values in excess of 0.70. The independence of the six scales was also measured statistically. The results of mean inter-scale correlation analysis (Spearman) revealed that the inter-relationships between the scales varied between school samples. For example, correlation coefficients for the emphasis on learning scale varied from 0.12 to 0.54 and for transformational leadership from 0.29 to 0.84. This suggested that the level of interaction between the cultural elements and consequently their influence on the overall culture was a characteristic of the culture of the school. It was also revealed that higher mean scale scores were usually accompanied by higher inter-scale correlations. High scale mean scores and correlation coefficients were interpreted as being indicative of a strong school culture. The SCEQ findings were supportive of the proposition that school culture was comprised of interactive cultural elements. When these elements were well developed within a school, the six elements coalesced into a unified entity, a strong culture.

SCEQ data from the re-administration of the instrument in three schools was compared with the initial data by single factor Annova analysis of variance. In one school, the only statistically significant variation in its culture was for transformational leadership. The scale mean scores and correlation coefficients for the other elements had not changed significantly. This result was confirmed during the interviews and indicated that the culture of this school was essentially stable over the period of investigation. In another school, both teacher efficacy and transformational leadership underwent statistically significant increases, although the scale

mean scores for the other four elements were essentially static as were the overall correlation coefficients. The increases in scale mean score for teacher efficacy and transformational leadership were explained by the principal. He had implemented strategies to reinforce the educative mission of the school and provide highly visible support for school programmes. The data from the third school evidenced cultural transformation. The mean inter-scale correlation coefficients increased for all cultural elements and the mean scale scores increased for five of the six cultural elements with statistically significant increases for collaboration and transformational leadership. All of the interviewees in this school considered the school culture had improved. The findings from the three schools showed that aspects of school culture can change over a time span of as short as one year. The data from the third school indicated that major changes are also possible within this period.

The interview programme solicited information from interviewees about the influence of school level innovations and educational system and government policies on the culture of their schools. School initiatives intended to improve student learning emerged as being influential on cultural development. Examples of these included school-wide projects on student literacy, student centred learning strategies and a student behaviour management programme. Non-instructional operationally oriented school programmes did not necessarily lead to cultural development. For example, formal school development planning procedures based on corporate organisational development principles were perceived as a distraction from classroom teaching. Interviewee findings also revealed that school culture had the capacity to either accommodate or resist externally imposed innovations. Mandated local systemic re-structuring policies had not effected changes in school culture consistent with the policy intentions. Instead, there was evidence that the policies stimulated collegiate resistance which increased the capacity of the culture to oppose implementation. Alternatively, systemic moves towards curriculum reform based upon student learning outcome statements were evidenced as having inconsistent effects on school culture. Some teachers considered the initiative to have increased collaboration and been of benefit in their classrooms, others viewed it as another example of an ephemeral curriculum restructuring initiative which should be ignored. In the latter instance, resistance to the initiative was strengthened by collegiality and the belief that the outcome statements were not of consequence to improved student learning.

Perceptions of the effectiveness of school and professional development programmes were also solicited during the interviews. Interviewing revealed that teachers perceived there was a lack of attention being given to school cultural growth issues in current development programmes Teachers were critical of the emphasis given to formal school development planning, it was perceived as time consuming and lacking relevance to classroom instruction. This was reflected in low SCEQ scale scores for the shared planning element in the schools studied. Successful development programmes needed to relate to classroom practice. This preference was consistent with high SCEQ scores for the emphasis on learning scale in both schools. Development programmes which utilised strategies of a collegiate and collaborative nature including workshops, small groups and hands on activities received favourable comment. Another common preference was for the planning of development programmes to be collaborative and shared so that teachers had control of the content and presentation strategies. These opinions suggested that teachers valued school development programmes which were likely to effect cultural growth rather than those which centred upon the formal requirements of the school organisation or of the educational system.

THE SCHOOL IMPROVEMENT MODEL OF SCHOOL CULTURE

The School Improvement Model of School Culture presented in Figure 1 was developed to provide a representation of the relationships between the six cultural elements and their contribution to the overall school culture.

The hub of the model is the values and norms of the individual teachers. These are the building blocks of school culture which develops as they are exchanged between colleagues. In the absence of this exchange process, the individual teachers remain professionally and socially isolated from one another and there is an absence of school culture. Teachers work independently in their own classrooms without common goals and the instructional program results from the application of individual knowledge and skills. When problems arise, there is no collegiate support and individual teachers are responsible for solving their own problems. The celebration of success does not extend beyond the classroom and encouragement and rewards from colleagues are not forthcoming. Professional growth of teachers is a personal responsibility and they do not have access to the knowledge and experiences of immediate colleagues.

Figure 1. School Improvement Model of School Culture

Compliance with regulatory and statutory requirements also becomes a personal responsibility. The demands of the formal organisation are transmitted directly to the teacher whose personal and professional capacities dictate the nature of the response. If teachers cannot accommodate this pressure, they may withdraw and further strengthen the boundaries around the classroom thus preventing scrutiny of their work. Similar defence mechanisms may also be utilised to passively resist these pressures. In such instances, the absence of collective concerns and response strategies allows traditional management approaches to be utilised in controlling the school. The line management process is applied one-on-one in a closed environment. Interaction between the teacher and the administrator is private, negotiation of industrial and professional issues occurs individually.

Radiating from the hub of the model are the six cultural elements. These are the vehicles for the development of school culture and the improvement of the school. Interpersonal interaction between teachers allows expression of individual needs, beliefs and attitudes. Dialogue enables these to be exchanged, personal expectations are ameliorated in consideration of the expectations of others and the common values and norms which are the school's culture

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emerge. Teacher efficacy concerns the value which teachers place on the social institution of education and the application of pedagogical principles in their work. It also includes a commitment to the mission of their own school. An emphasis on learning, is school specific and centres upon the individual school's learning programme including the learning of teachers. This element concerns application of the efficacious values within the school and the extent to which the school is a learning community. Collegiality includes propositions about interpersonal relationships between teachers and the need for teachers to be empowered. Collaboration also concerns the interaction between teachers but focuses on discourse of a more formal nature related to the operations of the school. Shared planning is a school-wide construct which assumes teachers have a mutual understanding of their school's goals and participate in programmes to evaluate and implement these goals. Transformational leadership, is concerned with the role of the school administration in supporting teachers and school programmes.

The rim of the model is the school culture. This is comprised of the six cultural elements and is consequential on their level of development within the school. The model assumes that a strong school culture is evidenced by a high level of development of all six elements. The elements have transformed the values and norms of individual teachers and produced the common values and norms which govern collective behaviour. The school effectiveness and improvement orientation of the elements produces a school culture which is expected to be conducive of improved student learning within the school and school growth directed at this objective.

A school culture with well developed cultural elements is expected to produce a professional working environment with certain features. The teachers do not work in isolation from their colleagues and are bonded together by common needs and expectations. Their efficacious values are given effect by membership of a community which emphasises the learning of students. Collegiality provides the teachers with support from colleagues which increases their confidence in their capacity to educate students and to be active participants in innovations. There is an atmosphere of trust and empowerment which is non-judgemental and accommodative of mistakes. Problems and successes are shared, the professional growth of teachers builds upon the experiences of others and the resulting increased pool of knowledge.

Collaboration provides school wide consistency in instructional approaches and the socialisation of students. As students move from class to class and progress from year to year, previous learning experiences are reinforced and extended through a sequential and coordinated curriculum. A school-wide instructional programme developed and refined through collaboration between teachers is also well understood by these teachers thus enhancing the effectiveness of its delivery.

Shared planning enables teachers to develop a shared vision of the school's future and to collectively plan how this is to be realised. There is unity of purpose and commonality of action. This is facilitated by the planning process being well organised and based upon rational decision-making principles. Active participation in school-wide decision-making requires teachers to understand the procedures by which the effectiveness of current programmes is assessed and new programmes are planned. Teachers have the knowledge and resulting power to be equal partners in decisions concerning the future of the school and their work.

Transformative leadership nurtures and reinforces the culture of the school community. Control of the school is divested from the administration to the community by the leadership focussing on the growth of the school and teachers. Responsibility for the operation of the school is not abrogated by transformational leaders, alternatively this is shared with teachers so the school community assumes responsibility for the successes and failures of the school. The growth of the school occurs though a process of learning in which all members of the staff are initially exposed to the problems facing the school and share the uncertainty about how these are to be solved. The immersion of teachers in school issues and problems challenges their understanding of the school and their own work. This engagement stimulates their personal and professional capacities which are then brought to bear on the problem. Possible solutions are widely discussed leading to the development of consensus on subsequent action. This process harnesses the energy and expertise of teachers and by challenging their existing professional knowledge, facilitates professional growth. The school culture is strengthened because transformational leadership increases the bonding and inter-dependency between teachers.

Cultural Stability

The model also assumes that the six elements are inter-independent and inter-active. Each element contributes to the school culture and is in turn influenced by the culture and the five other elements. The school culture is in a state of dynamic equilibrium which is responsive to internal pressures and those emanating from the formal organisation of the school and external agencies. The balance between the six elements and the overall culture is not static. The persistence of the existing culture is dependent on perturbations in the balance of the cultural elements being relatively minor. The culture is maintained. Cultural growth occurs when internal or external pressures produce an overall strengthening of the six elements and result in a new equilibrium being established. Alternatively, the culture may decline when there is a weakening of specific elements which is not compensated for by other elements becoming stronger and the previous equilibrium not being re-established. In this case a new equilibrium is established with weaker cultural elements. Cultural disintegration may occur when there is an overall weakening of all elements of sufficient extent to prevent the establishment of a new equilibrium. In this instance, the school becomes an agglomeration of individuals who do not have common values or norms. Such a situation is not necessarily permanent and the culture may be re-generated if teachers perceive a need for a collective response to common needs or problems. This response, which may be initially be concentrated on upon one or more cultural elements, is likely to stimulate development of the other elements and lead to a new culture being generated.

The six cultural elements provide mechanisms for the school staff to discuss and evaluate demands being placed upon the school. They are able to make collective decisions about acceptance or rejection of new programmes and policies and these decisions will have widespread support within the school. The capacity of the teachers to decide upon a common response is dependent upon the school culture being well developed. If the cultural elements are weak, the pressure for change will fall on individual teachers producing a diversity of individual responses including both rejection and acceptance. This inconsistency of response has the capacity to further divide the staff and in turn weaken and de-stabilise the culture.

A culture with weak elements also has the potential for growth. Stimulation of particular elements and their subsequent development can lead to the formation of a new equilibrium

between the six elements. This will occur when the stimulus is perceived by sufficient numbers of teachers to be of personal or professional consequence. Although the culture is weak, there are latent common beliefs and attitudes amongst the staff which may emerge with sufficient stimulation. In particular, the cultural elements of teacher efficacy and emphasis on learning are expected to be responsive to changes which may impact upon the school's instructional programme. Similarly innovations which may affect interpersonal relationships within the school could trigger changes in the level of collegiality within the school.

Internal Influences on Cultural Change

Changes in the internal conditions of the culture have the potential to stimulate changes in the overall culture because the beliefs and attitudes of teachers which are collectively expressed through the school's culture are not static. The culture is susceptible to influences of an internal nature through changes in value systems and norms resulting from the interaction between individuals and groups within the school. This is a cyclical evolutionary process in which individual and group needs influence the development of collective values and norms which in turn govern behaviour and professional activity. If the original needs are not realised in the new patterns of behaviour and work, another cycle commences. The culture is continuously being regenerated by adjusting to changing internal conditions.

Changes in the culture including growth and decline can be stimulated by specific changes in the internal conditions of the culture. If interaction between teachers results in personal and group needs being satisfied the interactive behaviour will be reinforced and the culture will grow. Alternatively if the interaction does not satisfy needs, the interactive behaviour is not reinforced and the culture may decline. The cultural elements of teacher efficacy, emphasis on learning and collegiality are an expression of beliefs and values concerning the education of students and mutually supportive interpersonal relationships. These three elements are the key elements of internal cultural stimulation because their focus is on fundamental professional and social values. The other three elements are also expressions of beliefs and values, but these are more oriented towards the needs of the school rather than those of the individual teacher.

Cultural change can be stimulated when teachers express their own professional and personal needs to colleagues. If this discourse reveals commonality of needs and results in collective

values being established, there is potential for cultural growth. However, if there is no commonality of needs and collective values are not established, there is potential for cultural decline. A school in which teachers are not efficacious, do not value learning and do not feel a need for collegiality, does not have internal conditions conducive to cultural maintenance or growth. In such schools, cultural change is dependent upon influences emanating from the formal school organisation and external agencies. These influences may facilitate cultural maintenance or stimulate cultural growth, they may also result in cultural decline.

External Influences on Cultural Change

The susceptibility of a school's culture to external influence is consequent on the strength of the culture and also upon the congruency between the existing culture and the external demands. The strong culture is stable irrespective of the congruency between external demands and the inherent beliefs and values of the teachers which constitute the culture. In a weak culture, congruent demands have the potential to stimulate growth, whereas incongruent demands may cause the culture to further decline.

A strong school culture has the capacity to accommodate or reject specific external demands because of the presence of mechanisms which facilitate the development of collective attitudes towards the demands. If there is congruency between existing values and the requirements of an externally instigated innovation, it is likely that teachers will accept and implement the innovation. If the requirements of the innovation conflict with the prevailing culture, teachers may reject the innovation and resist implementation. In this instance, the common values and bonding between teachers produce unified opposition. The resulting resistance is given increased momentum by the resolve of individuals being strengthened through the support of their colleagues. There is resonance within the culture which amplifies the original level of resistance. Thus a strong culture persists irrespective of the nature of external pressures.

A weak school culture in which the six elements are not well developed can be destabilised when subjected to external pressures. There is potential for either cultural growth or decline. Cultural growth is triggered by the formation of a critical mass of individual attitudes. When a sufficient number of teachers have independently evaluated the consequences of accepting or rejecting an innovation and there is consistency of opinion amongst the staff, the critical mass

has been formed. By sharing their opinions with colleagues, the commonality of needs and expectations become evident and teachers with a similar disposition group together. Membership of this group reinforces individual attitudes and colleagues support each other in responding to the external demand. Teachers experience the benefits of participation in collective activity including collegiality and collaboration which strengthen bonding and professional relationships. The culture grows and is intensified as teachers appreciate the power of collective activity and a unified response to common concerns. From the initial presence of common attitudes towards an external demand a new value system has developed within the school, teachers value their culture.

The decline of a weak culture occurs when external pressures increase the disparity between the beliefs and values of individual teachers. The teachers in a weak culture are relatively independent of one another and focus their energies on the classroom and not on school-wide matters. Their knowledge and skills centre upon student instruction and they may be naive when confronted with initiatives requiring an understanding of non-instructional issues. The notion of a critical mass of teacher opinion can be used to explain cultural decline. An external demand may of consequence for teachers, but in a weak culture it is possible that the critical mass will not form. When the teachers perceive the existence of disparate attitudes concerning implementation of an externally instigated innovation it is likely there will be reluctance to openly express opinions. Expressions of acceptance or resistance will be made in a confidential manner to colleagues who are perceived to have a similar disposition. The lack of empowerment and collegiality necessitates caution when discussing controversial matters because of the likelihood of criticism or conflict. Although in reality, common ground may exist, teachers will not take the risk of having their views questioned or rejected. The formation of the critical mass of common opinion is frustrated by entrenched beliefs about the safety of isolation and the security of membership of a cadre of like minds. The fragmentation of the school staff is compounded by the cohesion within these cadres and their capacity to reinforce a value system which is opposed to school-wide collegiality and collaboration. The school culture declines and sub-cultures are strengthened.

CONCLUSIONS

The School Improvement Model of School Culture provides a means of examining the culture and improvement of schools. It embodies the following propositions:

- Schools can be conceptualised as learning communities with characteristic cultures;
- School culture is comprised of cultural elements;
- Cultural elements facilitate cultural maintenance and growth;
- Cultural elements are vehicles for improving the effectiveness of schools;
- School culture is an internally dynamic interactive system;
- School culture is also an open system in interaction with the external environment;
- Cultural growth and school improvement occurs when the cultural elements are well developed;
- Cultural change can be stimulated by internal and external influences;
- Strong cultures are resilient when subject to external pressures;
- Weak cultures are inherently unstable and can be further destabilised or strengthened when subject to external pressures; and
- The effectiveness of school improvement activities is dependent on utilisation of culturally oriented planning and implementation strategies.

The model is a representation of the school focussed on the values and norms of teachers which govern professional interpersonal interaction. The inter-relationships existing within the culture and between the culture, the formal school organisation and external environment provides a context for examination of school change and development. The school effectiveness grounding of the cultural elements ensures that the model has a school improvement orientation. The utilisation of community and effectiveness constructs affirms the need for teachers to be empowered professionals in control of their own work and the operations and future direction of the school. This approach is a significant departure from organisational management conceptions of schools in which the professional activity of teachers, their professional growth and the development of the school are a consequence of the requirements of the formal organisation of the school and of the educational system.

List of References

Anderson, C. S. (1982) . *The search for school climate: a review of the research. Review of Educational Research*, 52(3), 368-420.

Cavanagh, R. F. and Dellar, G. B. (1995) . *Devolution from the perspective of school culture. The Practising Administrator,* 17(4), 8-13, 38-39.

Cavanagh, R. F. and Dellar, G. B. (1995) *The development of an instrument for investigating school culture*. Paper presented to the 1996 Annual Meeting of the American Educational Research Association.

Cavanagh, R. F. (1997) . *The culture and improvement of Western Australian secondary schools*. Unpublished doctoral dissertation. Curtin University: Western Australia.

Cavanagh, R. F. and Dellar, G. B (1997) . *School culture: a quantitative perspective on a subjective phenomenon*. Paper presented to the 1997 Annual Meeting of the American Educational Research Association.

Dalin, P. , Rolff, H. and Kleekamp, B. (1993) . *Changing the school culture*. London: Cassell.

Erikson, F. E. (1987) . Conceptions of school culture: an overview. Educational Administration Quarterly, 23(4), 11-24.

Follett, M. P. (1941) . *Dynamic administration: the collected papers of Mary Parker Follett*. Metcalf, H, C. and Urwick, L. (Eds). New York. Harper and Brothers.

Fullan, M. G. (1993) . *Change forces probing the depths of educational reform*. London: The Falmer Press.

Fullan, M. G. and Hargreaves, A. (1992) . *Whats worth fighting for in your school?* Buckingham: Open University Press.

Getzels, J. W. , Lipham, J. M. and Campbell, R. F. (1968) . *Educational administration as a social process*. New York. Harper and Row, Publishers.

Getzels, J. W. and Thelen, H. A. (1960) . The classroom group as a unique social system. *NSSE Yearbook,* 49 (2), 80. Chicago. National Society for the Study of Education.

Greene, J. C., Caracelli, V. J. and Graham, W. F. (1989) . Towards a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3) , 255-274.

Halpin, A. W. and Croft, D. B. (1962) . *The organisational climate of schools*. Washington DC. Office of Education.

Hargreaves, A. (1994) . *Changing teachers, changing times: teachers' work and culture in the postmodern age*. London: Cassell.

Hargreaves, D. (1995) . School culture, school improvement and school effectiveness. *School Effectiveness and School Improvement*, 6(1), 23-46.

Hillman, J. and Stoll, L. (1994). *Research matters No. 1: Understanding school improvement*. London. Institute of Education.

Maxwell, T. W. and Thomas, A. R. (1991) . School climate and school culture. *Journal of Educational Administration*, 29(2), 72-82.

Sammons, P. , Thomas, S. and Mortimore, P. (1995) . *Accounting for variations in academic effectiveness between schools and departments*. Paper presented at the 1995 annual conference of the European Conference on Educational Research, Bath.

Scott, W. G. (1961) . Organisation theory: an overview and approach. *Academy of Management Journal*, 1961 (April), 15.

Sergiovanni, T. J. (1993) . *Organisations or communities? Changing the metaphor changes the theory. Invited address*, American Educational Research Association, Atlanta, Georgia.

Tagiuri, R. (1968) . The concept of organisational climate. *Organisational climate: Exploration of as concept*. Tagiuri, R. and Litwin, G. H. (Eds). Boston. Harvard University, Division of Research, Graduate School of Business Administration.

Whitaker, P. (1993) . *Managing change in schools*. Buckingham: Open University Press.